Peter **Wendol** kowski   To: Peter Wendolkowski/DC/USEPA/US@EPA
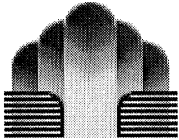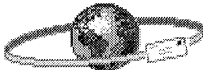   CC:
04/30/2003 03: 13 PM   CC:
                                Subject: Environmental Defense comments on proposed Alkyl Diphenyl
                                         Oxide Disulfonates Category

Richard_Denison@environmentaldefense.org on 04/30/2003 11:46:47 AM

To: oppt.ncic@epamail.epa.gov, hpv.chemrtk@epamail.epa.gov, Rtk   Chem/DC/USEPA/US@EPA,
        Karen Boswell/DC/USEPA/US@EPA, cldeford@dow.com
CC: MTC@mchsi.com, LUCIERG@msn.com, kflorini@environmentaldefense.org,
        rdenison@environmentaldefense.org

Subject: Environmental Defense comments on proposed Alkyl Diphenyl Oxide Disulfonates Category

(Submitted via Internet 4/30/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov,
boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and
cldeford@dow.com)

Environmental Defense appreciates this opportunity to submit comments on
the robust summary/test plan for the proposed Alkyl Diphenyl Oxide
Disulfonates   Category.

The Dow Chemical Company, in response to the EPA's High Production Volume
Challenge, has submitted a Robust Summary/Test Plan for seven alkyl
diphenyl oxide disulfonates (ADPODS), with the proposal that they be
considered together as a category. The Test Plan for this proposed category
provides an excellent description of the respective chemical structures,
their chemical/physical properties and their uses as surfactants in various
industrial and consumer products. Basically, each member of the proposed
category is based on the diphenyl oxide structure, with each having one or
two alkyl side chains ranging from six to sixteen carbon units, and one or
two sulfonate groups; each may exist as the acid or the sodium salt. The
surfactant properties of these chemicals are derived from the polar
sulfonate and a nonpolar alkyl diphenyl oxide moieties that each possesses

The Test Plan submitted for these chemicals is well written to justify
their consideration as a category, and describes a previous agreement with
EPA under which basic environmental tests were conducted with six ADPODS
chosen as representative of this class of chemicals. Thus, we agree that
they should be considered together as a category.

Use of the ADPODS as surfactants in cleaning products provides ample
opportunity for human and environmental exposure. Further, as surfactants
they are skin and eye irritants. These properties are well known and
appropriate measures appear to be taken to limit occupational and consumer
exposures to concentrated material. Toxicological studies of these
compounds described in the Robust Summary and summarized in the Test Plan
indicate members of this category have moderate toxicity to aquatic
organisms and mammals. Most of these toxicities also appear to be a result
of their surfactant properties and are observed primarily in those tissues
exposed to high concentrations. These chemicals have little systemic
toxicity and no apparent genetic toxicity, or reproductive and
developmental toxicity and little potential to bioaccumulate in the
environment.

Chemicals in this category have been used and studied for many years.
Thus, there is a considerable body of information to describe their

toxicity, and adequate data are presented in the extensive Robust Summary to address the requested SIDS elements for most of these chemicals. Since these chemicals have been studied over a long period of time, some of these studies are old and predate the development of GLP, but they appear to be sufficient to characterize the toxicity of these compounds. In those cases where the data are considered inadequate, The Dow Chemical Company proposes to test the C-6 and C-16 products to generate the necessary data and extrapolate from these results to predict values for other category members for the respective SIDS elements. Given the fact that the C-6 and C-16 products bracket the molecular weights and chemical/physical properties of the category, we feel this is appropriate.

Thank you for this opportunity to comment.

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Consulting Toxicologist, Environmental Defense

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Senior Scientist, Environmental Defense